REMARKS

STATUS OF CLAIMS

Claims 1-18 have been pending.

Claims 1-18 are rejected under 35 USC 102(e) as being anticipated by Mattson (US Patent No. 6,430,741).

Claims 1, 7-8 and 13-14 are amended.

New claims 19 and 20 are added.

Thus, claims 1-20 remain pending for reconsideration, which is respectfully requested.

No new matter has been added in this Amendment. The foregoing rejection is hereby traversed.

CLAIM REJECTION

In responding to the previous arguments in the November 12, 2003 Amendment After Final, the examiner asserts that Mattson discusses examining an access state and a number of accesses of a data item, citing column 3, lines 31-40 and column 5, lines 9-25 of Mattson. (Office Action, p. 6). The examiner further explains that "the color-coding of elements defines an access state" (Office Action, p. 6).

Upon reviewing the cited sections of Mattson, however, it appears that the examiner improperly separates the discussion of an example of visualization using the visualization tool from the function of the visualization tool. Specifically, the cited portion of Mattson relied upon by the Examiner, discloses "using a visualization tool which displays the number of times each element in the data table has been accessed" (Mattson, col. 3, lines 32-33). Mattson continues by providing one example of visualization, i.e., "represent[ing] different ranges of access in different colors" and then lists a preferred embodiment, in which "Black would be used to indicate a high access level, Pink to indicated a low access level, and Red to indicate unaccessed items." (Mattson, col. 3, lines 36-40). However, the Applicants emphasize that the Examiner should recognize that the Mattson's example of a color-coded display of the number of times each element in the data table has been accesses is simply an example of visualization of the number of times each element in the data table has been accessed. Therefore, Mattson does not disclose or suggest using color codes to indicate anything other than the number of times (frequency) of access. In contrast to Mattson, the present claimed invention provides,

"means for examining, as an access state of a data item in said program, an access ~~state~~ type and a number of accesses ~~of a~~of the data item in said program" (e.g., claim 1 as amended).

More particularly, the independent claims 1, 7, and 13 are amended to further emphasize the patentably distinguishing features of the present invention by clarifying that in contrast to Mattson, the present claimed invention provides:

> 1. (CURRENTLY AMENDED) A system analysis apparatus for analyzing a system containing one or a plurality of programs, comprising:
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> means for examining, as an access state of a data item in said program, an access ~~state~~ type and a number of accesses ~~of a~~of the data item in said program; and
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> an analyzer for analyzing degree of association relationships between processes and data items based on said access ~~state~~ type and the number of accesses of the data item, each said process being at least one of a program, a set of programs and a program section.

Support for the claim amendments can be found, for example, on page 6, lines 1-12, of the present Application, which discloses that "access state" includes both "access type" and "number of accesses" (page 6, lines 6-7 of the present Application). As disclosed in the Specification of the present invention, "access type" refers to a type of access, e.g., reference, update, read, etc., and is tabulated separately from the number of accesses (Specification, p. 6, lines 6-7; page 7 to page 10, line 4; and FIGS. 4-6). Mattson only discloses an example of color-coded visualization of the number of accesses, but does not disclose or suggest the present claimed invention's examining a type of access of a data item in a program (i.e., "... examining ... an access ~~state~~ type and a number of accesses ~~of a~~of the data item in said program"). The color-code example in Mattson is not at all related to preset claimed invention's "an access type ... of the data item in said program."

NEW CLAIMS 19 AND 20

New claims 19 and 20 are also patentably distinguishing over Mattson, because in contrast to Mattson, the present invention as recited in new independent claim 19 provides,

> 19. (NEW) A system analysis apparatus analyzing a system containing at least one program, comprising:
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> a programmed computer processor controlling the system analysis apparatus according to a process comprising:
>
> examining, as an access state of a data item in the least one program, an access type and a number of accesses of the data item in the at least one program, and
>
> analyzing degree of association relationships between processes of the at least one program and the data item based on said access type and the number of accesses of the data item, each process of the at least one program being at least one of a program, a set of programs and a program section, of the at least one program (emphasis added).

Mattson in column 3, lines 31-40 and column 5, lines 9-25, only discloses generates coverage information 106 indicating how many times the various elements of data tables specified in the data coverage specification 102 were accessed during execution, so that Mattson does not disclose or suggest the present claimed invention's, "examining, as an access state of a data item in the least one program, an access type and a number of accesses of the data item in the at least one program ... (new independent claim 19).

Further, in contrast to Mattson, new dependent claim 20 provides: "quantifying the types of accesses to the data item and the number of accesses, which are included in said data item access state, and generating quantified data item access state data." Mattson does not provide the present claimed invention's "quantifying the types of accesses to the data item."

Support for the new claims 19-20 can also be found, for example, on page 6, lines 6-7; page 7 to page 10, line 4 (in particular, page 7, lines 2-19); and FIGS. 4-6; of the present Application.

CONCLUSION

In view of the remarks and claim amendments, withdrawal of the rejection of claims 1-18 and allowance of claims 1-18 and new claims 19-20 is respectfully requested.

There being no further objections or rejections, it is submitted that the application is in condition for allowance, which action is courteously requested.

Finally, if there are any formal matters remaining after this response, the examiner is requested to telephone the undersigned to attend to these matters.

Respectfully submitted,
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